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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,482	07/02/2003	Daniel David Lecloux	UC0213 US NA4	3485

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WILMINGTON, DE 19805

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,482

Applicant(s)

LECLOUX ET AL.

Examiner

Marie R. Yamnitzky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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This application contains claims directed to the following patentably distinct species of the claimed invention: an electronic device comprising an electron transport and/or anti-quenching layer positioned between a cathode and a photoactive layer, wherein the electron transport and/or anti-quenching layer comprises

(A) a phenanthroline derivative wherein the phenanthroline derivative is

- (i) a compound of any of formulae II(a) through II(i) as shown in Fig. 5A through 5I, or
- (ii) a compound of formula III(a) as in Fig. 6A/claim 9, or
- (iii) a compound of formula III(b) as in Fig. 6B/claim 11 or

(B) a quinoxaline derivative wherein the quinoxaline derivative is

- (i) a compound of any of formulae V(a), V(b), V(d), V(e), V(g) through V(i), V(k) through V(r), V(t) through V(z) and V(ad) through V(ag) as shown in Fig. 9A, 9B, 9D, 9E, 9G through 9I, 9K through 9R, 9T through 9Z and 9AD through 9AG, or
- (ii) a compound of formula V(c) as shown in Fig. 9C, or
- (iii) a compound of any of formulae V(f) and V(s) as shown in Fig. 9F and 9S, or
- (iv) a compound of formula V(j) as shown in Fig. 9J, or
- (v) a compound of any of formulae V(aa) and V(ab) as shown in Fig. 9AA and 9AB, or
- (vi) a compound of formula V(ac) as shown in Fig. 9AC, or
- (vii) a compound of formula VI(a) as shown in Fig. 11A, or

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- (viii) a compound of any of formulae VI(b) through VI(d) and VI(f) as shown in Fig. 11B through 11D and 11F, or
- (ix) a compound of any of formulae VI(e) and VI(g) as shown in Fig. 11E and 12G, or
- (x) a compound of formula VI(h) as shown in Fig. 11H, or
- (xi) a compound of formula VI(i) as shown in Fig. 11I, or
- (xii) a compound of any of formulae VI(j) and VI(k) as shown in Fig. 11J and 11K.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (one of (A)(i)-(B)(xii)) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Applicant is also required to select an ultimate species (a specific compound) that will be used as the starting point for search and examination purposes if the elected species covers more than a single compound. Currently, claims 1-4 and 23 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. (With respect to claims 6, 7, 13, 14, 17, 18 and 22, the examiner notes that each of Formulae II, V, VI and VII encompasses at least one of species (A)(i)-(B)(xii).) An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Miscellaneous:

Formula VI(d) in Fig. 11D is the same as formula VI(b) in Fig. 11B.

Claim 19 refers to formula VI(g) as being in Figure 11. Formula VI(g) is labelled in the drawings as Fig. 12G.

Formulae VI(h) in Fig. 11H is incomplete.

Claim 20 refers to Formulae VI(l) and VI(m) in Figure 11 and claim 21 refers to Formula VI(m) in Figure 11. The examiner notes that there is no Formulae VI(l) or VI(m) in the figures. Accordingly, formulae VI(l) and VI(m) are not listed among the species set forth in the election of species requirement.


Claim 23 is an improper multiple dependent claim. The phrase --one of-- should be inserted before "Claims" in line 1.

Correction of these miscellaneous issues need not be made in response to this election of species requirement. However, applicant may want to correct one or more of these issues if relevant to the elected species.

Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY  
April 26, 2005

  
MARIE YAMNITZKY  
PRIMARY EXAMINER

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